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REISSUE APPLICATION DECLARATION BY THE INVENTOR	Docket Number (Optional) GENSP103R1
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I hereby declare that:

Each inventor's residence, mailing address and citizenship are stated below next to their name.

I believe the inventors named below to be the original and first inventor(s) of the subject matter which is described and claimed in patent number 6,320,574, granted November 20, 2001 and for which a reissue patent is sought on the invention entitled CIRCUIT AND METHOD FOR GENERATING PIXEL.

DATA ELEMENTS FROM ANALOG IMAGE DATA AND ASSOCIATED SYNCHRONIZATION SIGNALS

the specification of which

is attached hereto.

was filed on _____ as reissue application number _____

and was amended on _____
(If applicable)

I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b). Attached is form PTO/SB/02B (or equivalent) listing the foreign applications.

I verily believe the original patent to be wholly or partly inoperative or invalid, for the reasons described below. (Check all boxes that apply.)

by reason of a defective specification or drawing.

by reason of the patentee claiming more or less than he had the right to claim in the patent.

by reason of other errors.

At least one error upon which reissue is based is described below. If the reissue is a broadening reissue, such must be stated with an explanation as to the nature of the broadening:

The Patentee claimed less than he had a right to claim in the patent. Therefore, a reissue application is being filed to broaden the claims as shown in the attached Preliminary Amendment filed herewith.

[Page 1 of 2]

This collection of information is required by 37 CFR 1.175. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

(REISSUE APPLICATION DECLARATION BY THE INVENTOR, page 2)

Docket Number (Optional)
GENSP103R1

All errors corrected in this reissue application arose without any deceptive intention on the part of the applicant.

Note: To appoint a power of attorney, use form PTO/SB/81.

Correspondence Address: Direct all communications about the application to:

Customer Number: 22434

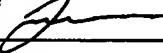
OR

<input type="checkbox"/> Firm or Individual Name			
Address			
Address			
City	State		Zip
Country			
Telephone	Fax		

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine and imprisonment, or both, under 18 U.S.C. 1001, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this declaration is directed.

Full name of sole or first inventor (given name, family name)

Alexander J. Eglit

Inventor's signature 	Date 11/18/2002
--	-----------------

Residence Canada	Citizenship Russia
------------------	--------------------

Mailing Address 4 Gilbert Drive, Aurora, Ontario L4G 6W8 CANADA

Full name of second joint inventor (given name, family name)

Inventor's signature	Date
----------------------	------

Residence	Citizenship
-----------	-------------

Mailing Address

Full name of third joint inventor (given name, family name)

Inventor's signature	Date
----------------------	------

Residence	Citizenship
-----------	-------------

Mailing Address

Additional joint inventors or legal representative(s) are named on separately numbered sheets forms PTO/SB/02A or 02LR attached hereto.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Alexander J. Eglit

Attorney Docket No.: GENSP103R1

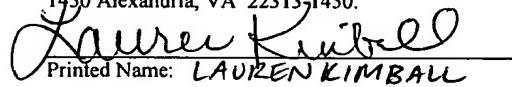
Application No.: Reissue of 6,320,574

Filed: Herewith

Title: METHOD AND SYSTEM FOR
DISPLAYING AN ANALOG IMAGE BY A
DIGITAL DISPLAY DEVICE (as amended)

CERTIFICATE OF EXPRESS MAILING

I hereby certify that this paper and the documents and/or fees referred to as attached therein are being deposited with the United States Postal Service on NOV. 20, 2003 in an envelope as "Express Mail Post Office to Addressee" service under 37 CFR §1.10, Mailing Label Number EV333981834, addressed to the Commissioner for Patents, Mail Stop Reissue, P.O. Box 1450 Alexandria, VA 22313-1450.


Printed Name: LAUREN KIMBALL

POWER OF ATTORNEY BY ASSIGNEE AND 37 CFR §3.73 STATEMENT

Mail Stop Reissue
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Genesis Microchip Inc. is the assignee of the above-referenced patent application by virtue of an assignment document. The assignment document is/was recorded:

- at Reel 8851, Frame(s) 0580
- on _____ (date)
- submitted concurrently herewith

The assignee represents, pursuant to 37 C.F.R. §3.73(b), that the undersigned is a representative authorized and empowered to sign on behalf of the assignee.

Pursuant to 37 C.F.R. §§1.36 and 3.71, the assignee hereby revokes all powers of attorney previously given and hereby appoints the law firm of Beyer Weaver & Thomas, LLP and all practitioners who are associated with the **Customer Number 022434** as principal

attorneys to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

Please send all correspondence for this application as follows:

Customer Number 022434

022434

BEYER WEAVER & THOMAS, LLP
P.O. Box 778
Berkeley, CA 94704-0778

Please direct any calls to **Michael J. Ferrazano** (650) 961-8300.

The undersigned is authorized to sign this document on behalf of the Assignee, Genesis Microchip Inc.

Assignee of Interest:

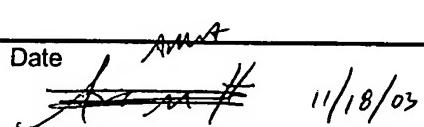
Genesis Microchip Inc.
2150 Gold Street
P.O. Box 2150
Alviso, CA 95002

Date

11/18/03

Ava M. Hahn
Name: Ava M. Hahn
Title: General Counsel

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

REISSUE APPLICATION: CONSENT OF ASSIGNEE; STATEMENT OF NON-ASSIGNMENT		Docket Number (Optional) GENSP103R1
This is part of the application for a reissue patent based on the original patent identified below.		
Name of Patentee(s) Eglit		
Patent Number 6,320,574	Date Patent Issued November 20, 2001	
Title of Invention CIRCUIT AND METHOD FOR GENERATING PIXEL DATA ELEMENTS FROM ANALOG IMAGE DATA AND ASSOCIATED SYNCHRONIZATION SIGNALS		
<p>1. <input checked="" type="checkbox"/> Filed herein is a statement under 37 CFR 3.73(b). (Form PTO/SB/96)</p> <p>2. <input type="checkbox"/> Ownership of the patent is in the inventor(s), and no assignment of the patent is in effect.</p>		
One of boxes 1 or 2 above must be checked. If multiple assignees, complete this form for each assignee. If box 2 is checked, skip the next entry and go directly to "Name of Assignee". The written consent of all assignees and inventors owning an undivided interest in the original patent is included in this application for reissue.		
The assignee(s) owning an undivided interest in said original patent is/are <u>Genesis Microchip Inc.</u> , and the assignee(s) consents to the accompanying application for reissue.		
Name of assignee/inventor (if not assigned) Genesis Microchip Inc.		
Signature 	Date  <i>Ava M. Hahn</i>	
Typed or printed name and title of person signing for assignee (if assigned) Ava M. Hahn, General Counsel		

This collection of information is required by 37 CFR 1.172. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

STATEMENT UNDER 37 CFR 3.73(b)Applicant/Patent Owner: Genesis Microchip Inc.Application No./Patent No.: 6,320,574 Filed/Issue Date: November 20, 2001Entitled: CIRCUIT AND METHOD FOR GENERATING PIXEL DATA ELEMENTS FROM ANALOG IMAGEDATA AND ASSOCIATED..., a corporation
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. the assignee of the entire right, title, and interest; or2. an assignee of less than the entire right, title and interest.The extent (by percentage) of its ownership interest is _____ %
in the patent application/patent identified above by virtue of either:

A. [] An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

OR

B. [x] A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: Alexander J. Eglit To: Paradise Electronics
The document was recorded in the United States Patent and Trademark Office at
Reel 8417, Frame 0841, or for which a copy thereof is attached.
2. From: Paradise Electronics To: Paradise Electronics, Inc.
The document was recorded in the United States Patent and Trademark Office at
Reel 8851, Frame 0580, or for which a copy thereof is attached.
3. From: Paradise Electronics, Inc. To: GMI NEWCO, Inc.
The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

[x] Additional documents in the chain of title are listed on a supplemental sheet.

[x] Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document)
must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be
recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

11/18/03Ava M. Hahn

Date

Typed or printed name

408-262-6599

Telephone number

Signature

General Counsel

Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

STATEMENT UNDER 37 CFR 3.73(b) ADDENDUM

Additional documents in the chain of title:

4. From: GMI NEWCO, INC. To: GENESIS MICROCHIP CORPORATION
for which a copy thereof is attached.

5. From: GENESIS MICROCHIP CORPORATION To: GENESIS MICROCHIP INC.
for which a copy thereof is attached.



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

MAY 14, 1997

PTAS

NAREN THAPPETA, ESQ.
2700 PLEASANTDALE ROAD, #T2
VIENNA, VA 22180



100383223A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, NORTH TOWER BUILDING, SUITE 10C35, WASHINGTON, D.C. 20231.

RECORDATION DATE: 02/24/1997

REEL/FRAME: 8417/0841
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNEE'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNEE:

EGLIT, ALEXANDER J.
PARADISE ELECTRONICS
2680 NORTH FIRST STREET
SAN JOSE, CALIFORNIA 95134

DOC DATE: 02/23/1997

SERIAL NUMBER: 08803824

FILING DATE: 02/24/1997
PATENT NUMBER:
ISSUE DATE:

MAYA BENNETT, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS



RECO.

100383223
PATENTS ONLYDEPARTMENT OF COMMERCE
Patent and Trademark Office
02/24/97

Attorney Docket No. PFDN-0002

To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof.

1. Name of conveyancing party(ies):

Alexander J. Egli

Additional name(s) of conveying party(ies) attached? Yes No

3. Nature of conveyance:

Assignment Merger
 Security Agreement Change of Name

Other: _____

Execution Date: February 23, 1997

2. Name and address of receiving party(ies):

Name: Paradise Electronics

Address: 2680 North First Street
San Jose, CA 95134Additional name(s) & address(es) attached? Yes No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: February 23, 1997

A. Patent Application No.(s)

B. Patent No.(s)

Additional numbers attached? Yes No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Naren Thappeta, Esq.

Address: 2700 Pleasantdale Road, #T2,

Vienna, VA 22180

6. Total number of applications and patents involved: One

Total fee (37 CFR 3.41): \$ 40.00

 Enclosed Authorized to be charged to deposit account, if necessary

8. Deposit account number: _____

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Maryam Imam
Name of Person Signing
Registration No. 38,180

Signature

2/24/97
Date

Total number of pages including cover sheet, attachments, and document: 3

Do not detach this portion

Mail documents to be recorded with required cover sheet information to:

Assistant Commissioner for Patents
Box Assignment
Washington, D.C. 20231

Public burden reporting for this sample cover sheet is estimated to average about 30 minutes per document to be recorded, including time for reviewing the document and gathering the data needed, and completing and reviewing the sample cover sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Office of Information Systems, PMS-1000C, Washington, D.C. 20231, and to the Office of Management and Budget, Paperwork Reduction Project (0651-0011), Washington, D.C. 20503.

SOLE TO CORPORATE ASSIGNMENT

WHEREAS, the undersigned, Alexander J. Eglit, (hereinafter termed "Inventor"), having a residence at 547 Highland Avenue, City of Half Moon Bay County of San Mateo, State of California has invented certain new and useful improvements in:

A METHOD AND APPARATUS FOR CLOCK RECOVERY IN A DIGITAL DISPLAY UNIT

and has executed a declaration or oath for an application for a United States patent disclosing and identifying the invention:

X On the 23rd day of February, 1997:

Or

— Said application having Application Number _____ and filed on the _____ day of _____.

WHEREAS PARADISE ELECTRONICS (hereinafter termed "Assignee"), a corporation of California, having a place of business at 2680 North First Street, San Jose, CA 95134, wishes to acquire the entire right, title and interest in and to said application and the invention disclosed therein, and in and to all embodiments of the invention, heretofore conceived, made or discovered by said Inventor (hereinafter termed "said invention"), and in and to any and all patents, certificates of invention and other forms of protection thereon (hereinafter termed "patents") applied for or granted in the United States and/or other countries.

NOW THEREFORE, for good and valuable consideration acknowledged by said Inventor to have been received in full from said Assignee:

1. Said Inventor does hereby sell, assign, transfer and convey to said Assignee, the entire right, title and interest (a) in and to said application and said invention; (b) in and to all rights to apply in any or all countries of the world for patents, certificates of inventions or other governmental grants on said invention, including the right to apply for patents pursuant to the International Convention for the Protection of Industrial Property or pursuant to any other convention, treaty, agreement or understanding; (c) in and to any and all applications filed and any and all patents, certificates of inventions or other governmental grants granted in said invention in the United States or any other country, including each and every application filed and each and every patent granted on any application which is a division, substitution, or continuation of any of said applications; (d) in and to each and every reissue or extension of any of said patents; and (e) in and to each and every patent claim resulting from a reexamination certificate for any and all of said patents.

2. Said Inventor hereby covenants and agrees to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest herein conveyed in the United States and other countries. Such cooperation by said Inventor shall include prompt production of pertinent facts and documents, giving of testimony, executing of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for complying with any duty of disclosure; (c) for prosecuting any of said applications; (d) for filing and prosecuting substitute, divisional, continuing or

additional applications covering said invention; (e) for filing and prosecuting applications for reissue of any of said patents; (f) for interference or other priority proceedings involving said invention; and (g) for legal proceedings involving said invention and any applications therefor and any patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, reexamination proceedings, compulsory licensing proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Inventor in providing such cooperation shall be paid for by said Assignee.

3. The terms and covenants of this Assignment shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Inventor, and his or her heirs, legal representatives and assigns.

4. Said Inventor hereby warrants and represents that the inventor has not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

IN WITNESS WHEREOF, the said Inventor has executed and delivered this instrument to said Assignee on the date given below.

2/23/97

Date


Alexander J. Eglit



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

FEBRUARY 06, 1998

PTAS

NAREN THAPPETA, ESQ.
P.O. BOX 2900
MERRIFIELD, VA 22116-2900



100595486A

UNITED STATES PATENT AND TRADEMARK OFFICE
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PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, NORTH TOWER BUILDING, SUITE 10C35, WASHINGTON, D.C. 20231.

RECORDATION DATE: 12/22/1997

REEL/FRAME: 8851/0580
NUMBER OF PAGES: 17

BRIEF: CHANGE OF NAME (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

PARADISE ELECTRONICS

DOC DATE: 05/21/1997

ASSIGNEE:

PARADISE ELECTRONICS, INC.
1999 CONCOURSE DRIVE
SAN JOSE, CALIFORNIA 95131

SERIAL NUMBER: 08803824
PATENT NUMBER:

FILING DATE: 02/24/1997
ISSUE DATE:

SEDLEY PYNE, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

RECD FEB 13 1997



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231



100595488B

AUTHORIZATION TO CHARGE ADDITIONAL FEES TO DEPOSIT ACCOUNT

FEBRUARY 06, 1998

TO: OFFICE OF FINANCE
FROM: ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS
SUBJECT: DEPOSIT ACCOUNT CHARGE(S)

CHARGE THE DEPOSIT ACCOUNT LISTED BELOW ADDITIONAL FEE(S) AS INDICATED BELOW. AUTHORIZATION TO CHARGE ADDITIONAL FEES HAS BEEN PROVIDED PER THE ATTACHED COVER SHEET, OR BY DIRECT CONTACT WITH THE CUSTOMER.

DEPOSIT ACCOUNT NUMBER: 20-0674
PROPERTY NUMBER: 08803824

RECORDING FEES:

FEE CODE: 581 AMOUNT: 40

IF YOU HAVE ANY QUESTIONS REGARDING THIS NOTICE, YOU MAY CONTACT THE INDIVIDUAL WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723.

SEDLEY PYNE, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

TRADEMARK SERVICE FEES:	FEE CODE:
RECORDING FIRST MARK	481
RECORDATION SECOND AND	482
SUBSEQUENT MARK IN SAME DOCUMENT	
LABOR CHARGES FOR SERVICES PER HOURS	484
OR FRACTION THEREOF	
UNSPECIFIED OTHER SERVICES	485

PATENT SERVICE FEES:

RECORDING EACH PATENT ASSIGNMENT. 581

AGREEMENT, OTHER PAPER, PER PROPERTY	
LABOR CHARGES FOR SERVICES PER HOUR	584
(\$30) OR FRACTION THEREOF	
UNSPECIFIED OTHER SERVICES	585

12-29-1997

Form PTO-1595

U.S. Department of Commerce
Patent and Trademark Office

100595488

To the Honorable Commissioner of Patents and Trademarks. Please record the attached original document _____ copy thereof.

1. Name of conveying party(ies):

Paradise Electronics

MLO

10-22-97

Additional name(s) of conveying party(ies) attached? yes no

3. Nature of Conveyance:

 Assignment
 Security Agreement Merger
 Change of Name
(Incorporated on
May 21, 1997)

Execution Date(s):

2. Name and address of receiving party(ies):

Name: Paradise Electronics, Inc.

Street Address: 1999 Concourse Drive

City: San Jose State: CA Zip Code: 95131

Country: U.S.A.

Additional name(s) & address(es) attached? yes no

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: N/A

A. Patent Application No(s): 08/803,824

B. Patent No(s).

Additional numbers attached?

 yes no

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Naren Thappeta, Esq.
Address: P.O. Box 2900
Menifield, VA 22116-2900
(703) 560-1800

6. Total number of applications and patents involved

1

7. Total fee (37 C.F.R. § 3.41).....\$ 40.00

 Enclosed Authorized to be charged to Deposit Account

8. Deposit Account Number: 20-0674

Attorney Docket No. PRDN-0002

DO NOT USE THIS SPACE

Chg 40

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Narendra Reddy Thappeta
Name of Person Signing
Registration No. 41,416

Signature

December 16, 1997

Date

Total number of pages including cover sheet, attachments and document _____

Mail documents to be recorded with required cover sheet information to:
Commissioner of Patents and Trademarks, Box Assignments
Washington, D.C. 20231

State of Delaware

PAGE

Office of the Secretary of State

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF INCORPORATION OF "PARADISE ELECTRONICS INC.", FILED IN THIS OFFICE ON THE TWENTY-FIRST DAY OF MAY A.D. 1987, AT 9 O'CLOCK A.M.

A CERTIFIED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS FOR RECORDING.

Edward J. Freel
Edward J. Freel, Secretary of State



1071438 8100

PT1-67241

AUTHENTICATION:

8478700

DATE:

05-23-97

**CERTIFICATE OF INCORPORATION OF
PARADISE ELECTRONICS, INC.**

The undersigned, a natural person (the "Sole Incorporator"), for the purpose of organizing a corporation to conduct the business and promote the purposes hereinafter stated, under the provisions and subject to the requirements of the laws of the State of Delaware hereby certifies that:

I.

The name of the corporation is Paradise Electronics, Inc. (the "Corporation" or the "Company").

II.

The address of the registered office of the Corporation in the State of Delaware is 1013 Centre Road, City of Wilmington, County of New Castle, State of Delaware 19805, and the name of the Corporation's registered agent at said address is Corporation Service Company.

III.

The purpose of the Corporation is to engage in any lawful act or activity for which a corporation may be organized under the General Corporation Law of the State of Delaware.

A. This Corporation is authorized to issue two classes of stock to be designated, respectively, "Common Stock" and "Preferred Stock." The total number of shares which the Corporation is authorized to issue is Eleven Million Two Hundred Thirty-Three Thousand (11,233,000) shares, Ten Million (10,000,000) shares of which shall be Common Stock, par value \$0.001 per share, (the "Common Stock") and One Million Two Hundred Thirty-Three Thousand (1,233,000) shares of which shall be Preferred Stock, par value \$0.001 per share, (the "Preferred Stock").

B. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares of Common Stock then outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation (voting together on an as-if-converted basis).

C. The Preferred Stock may be issued from time to time in one or more series. The Board of Directors is hereby authorized, within the limitations and restrictions stated in this Certificate of Incorporation, to fix or alter the dividend rights, dividend rate, conversion rights, voting rights, rights and terms of redemption (including sinking fund provisions), the redemption price or prices, the liquidation preferences of any wholly unissued series of Preferred Stock, and the number of shares constituting any such series and the designation thereof, or any of them;

and to increase or decrease the number of shares of any series subsequent to the issue of shares of that series, but not below the number of shares of such series then outstanding. In case the number of shares of any series shall be so decreased, the shares constituting such decrease shall resume the status which they had prior to the adoption of the resolution originally fixing the number of shares of such series.

IV.

Six Hundred Fifty Thousand (650,000) of the authorized shares of Preferred Stock, par value \$0.001, are hereby designated "Series A Preferred Stock" (the "Series A Preferred"). Five Hundred Eighty-Three Thousand (583,000) of the authorized shares of Preferred Stock, par value \$0.001, are hereby designated "Series B Preferred Stock" (the "Series B Preferred"). The shares of Series A Preferred Stock and of Series B Preferred Stock shall have the rights, preferences, privileges and restrictions set forth in this Article IV.

1. **Definitions.** For purposes of this Article IV, the following definitions shall apply:

a. "Original Issue Date" shall mean the date of filing of this Certificate of Incorporation for the Series A Preferred Stock and the Series B Preferred Stock.

b. "Original Issue Price" shall mean \$1.00 per share for the Series A Preferred Stock and \$4.55 per share for the Series B Preferred Stock (adjusted for stock splits, combinations and the like).

c. "Dividend Rate" shall mean 10% of the Original Issue Price per annum on a non-compounded, cumulative basis.

d. "Liquidation Preference" shall mean an amount per share of the Series A Preferred Stock and of the Series B Preferred Stock equal to the respective Original Issue Price for each share of each such series.

e. "Initial Conversion Price" shall mean with respect to Series A Preferred Stock an amount per share equal to the Original Issue Price, and with respect to the Series B Preferred Stock an amount per share equal to the Original Issue Price.

f. "Preferred Stock" shall mean the Series A Preferred Stock and the Series B Preferred Stock.

g. "Redemption Price" shall mean \$4.55 per share for the Series B Preferred Stock (adjusted for stock splits, combinations and the like), plus all declared but as yet unpaid dividends on the redeemed shares.

2. **Dividend Rights.** No dividend shall be paid on any of the shares of Common Stock of the Corporation during any fiscal year of the Corporation unless each holder

of outstanding shares of Preferred Stock has first received a dividend in an amount equal to the Dividend Rate for each share of Preferred Stock held by such holder for the period from the date when the share of Preferred Stock was issued.

All dividends declared and paid with respect to Preferred Shares shall be declared and paid first to the holders of Series B Preferred Stock, and shall be cumulative so that if such dividends in respect of any previous annual dividend period and the current annual dividend period at the applicable Dividend Rate per share shall not have been paid on or declared and set apart for the Series B Preferred Stock at the time outstanding, the deficiency shall be fully paid or declared and set apart for such shares before the Corporation pays any dividend on any other shares of Series A Preferred Stock or Common Stock of the Corporation. The dividends on the Series A Preferred Stock shall be cumulative so that if such dividends in respect of any previous annual dividend period or the current annual dividend period at the applicable Dividend Rate per share shall not have been paid on or declared and set apart for the Series A Preferred Stock at the time outstanding, the deficiency shall be fully paid or declared and set apart for such shares before the Corporation pays any dividend on any shares of Common Stock.

After the dividends to the holders of the Corporation's Preferred Stock during any fiscal year of the Corporation have been paid as described above, any additional dividends for Stock in proportion to the number of shares of Common Stock then held by them and the number shares of Common Stock which they would then have the right to acquire upon conversion of the shares of Preferred Stock held by them.

3. Voting Rights.

a. For Directors.

(i) Special Voting Rights For The Election of Directors.

Each time the stockholders of the Corporation meet, or act by written consent in lieu of a meeting, for the purpose of electing Directors (1) so long as at least 137,500 shares (subject to stock splits, combinations and the like) of Series A Preferred Stock are and continue to be outstanding, the holders of the Corporation's Series A Preferred Stock shall be entitled, voting as a separate class, to elect one, and only one, member of the Corporation's Board of Directors, and (2) so long as at least 275,000 shares (subject to stock splits, combinations and the like) of Series B Preferred Stock are and continue to be outstanding, the holders of the Corporation's Series B Preferred Stock shall be entitled, voting as a separate class, to elect one, and only one, member of the Corporation's Board of Directors. The holders of the Common Stock shall be entitled, voting as a separate class, to elect the third and fourth members of the Corporation's Board of Directors. The fifth and additional member(s) of the Board of Directors shall be elected by the highest affirmative vote of shares of Common Stock and Preferred Stock voting together as a single class for that purpose. In the event that less than 137,500 shares (subject to stock splits, combinations and the like) of Series A Preferred Stock are and continue to be outstanding, or less than 275,000 shares (subject to stock splits, combinations and the like) of Series B Preferred Stock are and continue to be outstanding, then the holders of the Series A

Preferred Stock and Series B Preferred Stock lacking the requisite number of shares as stated above shall no longer be entitled to elect a member of the Corporation's Board of Directors by voting as a separate class, and upon the expiration of the term of the Director elected by the vote of the holders of Series A Preferred Stock or Series B Preferred Stock voting as a separate class, the vacancy created thereby shall be filled by the candidate receiving the highest number of affirmative votes of the holders of Common Stock and such series of Preferred Stock voting together as one class.

(ii) **RemovalS Or Resignations.** Except as provided above, any vacancy created on the Corporation's Board of Directors shall be filled by a successor Director who shall be elected in a manner by which his or her predecessor was elected as provided above. Any Director who has been elected to the Corporation's Board of Directors as provided above may be removed during his term of office in accordance with the Delaware General Corporation Law, and any vacancy thereby created shall be filled as provided in this Section 3.

b. **Voting Rights Generally.** The holder of each share of Preferred Stock shall be entitled to the number of votes equal to the number of shares of Common Stock into which such shares of Preferred Stock could be converted, shall have voting rights and powers equal to the voting rights and powers of the Common Stock (except where a class or series vote is required by applicable law), and shall be entitled to notice of any stockholders meeting in accordance with the Bylaws of the Corporation. Fractional votes shall not, however, be permitted; and any fractional voting rights resulting from the above formula (after aggregating all shares into which shares of Preferred Stock held by each holder could be converted) shall be ignored.

c. **Protective Provisions.** The affirmative vote or written consent of holders of more than a majority of the Series A and Series B Preferred Stock, voting together as a single class for this purpose, shall be required for any action which (i) alters or changes the rights, privileges or preferences of the Preferred Stock; (ii) increases the number of shares of Preferred Stock authorized for issuance; (iv) creates any new class or series of shares having preference over or being on a parity with the Preferred Stock; (v) involves the merger, consolidation or reorganization of the Corporation (except the merger of a wholly-owned subsidiary of the Corporation with and into the Corporation), the sale by the Corporation of substantially all of its assets or the sale by the Corporation of shares of its capital stock which, once sold, whether in one transaction or a series of related transaction, would constitute more than 50% of the Corporation's then issued and outstanding Common Stock (calculated on a fully-diluted basis as if all then outstanding convertible securities were fully converted and all then outstanding stock options, warrants and stock purchase rights were fully exercised); (vi) involves any transaction which would result in a dividend to holders of Preferred Stock; (vii) pays dividends (other than in Common Stock) on the Corporation's issued and outstanding Common Stock; or (viii) causes the Corporation to repurchase or otherwise acquire shares of its capital stock, other than and excluding repurchases by the Corporation of such shares pursuant to (1) the terms of these Articles or (2) stock option plans or stock purchase plans with its employees, Directors, officers or consultants, at a price no greater than the Original Issuance Price or, if

required as a condition of any permit obtained, the fair market value for the repurchased shares at the time when repurchased.

4. Liquidation Rights.

a. Liquidation Preference.

(i) In the event of any liquidation, dissolution or winding up of the Corporation, either voluntary or nonvoluntary, if the fair market value of the assets of the Corporation available at that time for distribution to the shareholders, after satisfaction of or reasonable allowance for all of its debts and obligations, is less than \$50,000,000, the holders of Series B Preferred Stock and of Series A Preferred Stock, each *pari passu* in the proportion of the respective Original Issue Price of each Series, shall be entitled to receive all assets available for distribution, up to an amount equal to the respective Liquidation Preference for each share of Preferred Stock then held by them plus an amount equal to all declared and unpaid dividends on each share of such Preferred Stock, before any payment shall be made or any assets distribution to the holders of the Common Stock. The preferential distribution provided for the Preferred Shares in this section shall not, however, apply if the fair market value of the assets of the Corporation available at that time for distribution to the shareholders, after satisfaction of or reasonable allowance for all of its debts and obligations, is \$50,000,000 or more.

(ii) After the payments required by Section 4a(i) have been made, if applicable, all remaining assets and funds of the Corporation legally available for distribution shall be distributed among the holders of Common Stock and Preferred Stock in proportion to the number of shares of Common Stock then held by them and the number of shares of Common Stock which they would then have the right to acquire upon conversion of the shares of Preferred Stock then held by them.

(iii) A consolidation or merger of the Corporation with or into any other Corporation or Corporations where the Corporation is not the surviving Corporation, a sale of all or substantially all of the assets of the Corporation, or a sale, apart from the initial issuance of Series B Preferred Stock, of any shares of the Corporation's capital stock in any transaction or any series of related transactions occurring after the date of the filing of the Certificate of Incorporation of the Corporation which result in 50% or more of the issued and outstanding voting stock of the Corporation immediately following such transaction or such series of transactions (calculated as if all then issued and outstanding convertible securities of the Corporation were fully converted and all then issued and outstanding stock options, stock warrants and stock purchase rights for shares of the Corporation's stock were fully exercised) being held by holders who were not holders beforehand, shall be treated, at the election of holders of more than a majority of the then issued and outstanding Series A and Series B Preferred Shares, voting together as a single class, as a liquidation, dissolution or winding up within the meaning of this Section 4.

5. Conversion Rights.

a. **Optional Conversion.** The shares of Preferred Stock shall be convertible at the option of the holders thereof at any time after the date of issuance of such shares into fully paid and nonassessable shares of Common Stock of the Company at the respective Conversion Rate (defined in Section 5c below) then in effect for such shares of Preferred Stock.

b. **Automatic Conversion.** All shares of Preferred Stock shall automatically be converted into shares of Common Stock at the respective Conversion Rate then in effect upon the effectiveness of a registration statement under the Securities Act of 1933, as amended, for an underwritten public offering of the Company's Common Stock at a price per share of at least \$5.00 (adjusted for stock splits, combinations and the like) and which generates cash proceeds to the Company of more than \$7,500,000 net of all commissions, discounts and expenses of underwriters, on the condition that all dividends theretofore declared on the Preferred Stock have been paid in full. Upon such automatic conversion, the outstanding shares of Preferred Stock shall be converted into Common Stock without any further action by the holders of such shares and whether or not the certificates representing such shares are surrendered to the corporation or its transfer agent.

c. **Conversion Rate And Conversion Price.** "Conversion Rate" shall mean the number of shares of Common Stock of the Company issuable upon conversion of the Preferred Stock and shall be determined by dividing the respective Original Issue Price for such stock by the Conversion Price in effect, from time to time. "Conversion Price" shall initially be the respective Initial Conversion Price specified for the Series A Preferred Stock and for the Series B Preferred Stock, as the case may be, but shall be subject to adjustment from time to time as set forth in this Section 5.

d. **Stock Splits And Conversions.** If the Company at any time after the Original Issue Date of the Series B Preferred Stock effects a split or combination of its outstanding Common Stock without a proportionate and corresponding split or combination of its outstanding Preferred Stock, then the respective Conversion Price of the Series B Preferred Stock and of the Series A Preferred Stock shall be proportionately decreased (in the case of a stock split) or proportionately increased (in the case of a stock combination).

e. **Stock Dividends And Distributions.** If the Company shall at any time or from time to time after the first date that the first share of Preferred Stock is issued (the "Original Issue Date") make a dividend or other distribution, without consideration, of additional shares of Common Stock, the respective Conversion Price of each series of Preferred Stock then in effect shall be decreased as of the time of such distribution by multiplying such Conversion Price then in effect by a fraction (i) the numerator of which is the total number of shares of Common Stock issued and outstanding immediately prior to the time of such distribution and (ii) the denominator of which is the total number of shares of Common Stock issued and/or outstanding immediately after such distribution. If the Company at any time after the Original Issue Date of the Preferred Stock makes a dividend or other distribution, without consideration,

of securities of the corporation other than shares of Common Stock, then provision shall be made so that the holders of Preferred Stock shall receive upon conversion thereof, in addition to the number of shares of Common Stock issuable upon such conversion, the amount of securities of the Company which they would have received had their Preferred Stock been converted into Common Stock on the date of such distribution and had they thereafter retained such securities.

f. **Reclassification.** In case of any reclassification of the capital stock of the Company, each share of Preferred Stock shall thereafter be convertible into the number of shares of stock or other securities to which a holder of the number of shares of Common Stock into which the Preferred Stock was convertible would have been entitled upon such reclassification, and appropriate adjustment (as determined by the Board of Directors) shall be made in the application of the provisions set forth herein with respect to the rights and interests thereafter of the holders of the Preferred Stock, to the end that the provisions set forth herein shall thereafter be applicable, as nearly as reasonably may be, in relation to any share of stock or other property thereafter deliverable upon conversion of the Preferred Stock.

g. **Adjustments To Conversion Price Of Series A Preferred Stock Or Series B Preferred Stock For Diluting Issues.**

(i) **Special Definitions.** For purposes of this Section 5g, the following definitions shall apply:

(1) "Options" shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire either Common Stock or Convertible Securities.

(2) "Convertible Securities" shall mean any evidences of indebtedness, shares (other than Common Stock and the shares of Preferred Stock authorized herein) or other securities convertible into or exchangeable for Common Stock.

(3) "Additional Shares Of Common Stock" shall mean with respect to the Series A Preferred Stock, all shares of Common Stock issued (or, pursuant to Section 5g(iii), deemed to be issued) by the Company after the Original Issue Date for the Series A Preferred Stock, and shall mean with respect to the Series B Preferred Stock, all shares of Common Stock issued (or, pursuant to Section 5g(iii), deemed to be issued) by the Company after the Original Issue Date for the Series B Preferred Stock, in both cases other than (A) up to 1,000,000 shares of Common Stock, issued by the Company at purchase prices lower than the Original Issue Price for the Series B Preferred Stock, which is issued subsequent to the Original Issue Date for the Series B Preferred Stock and is issued to officers, Directors or employees of, or consultants to, the Company pursuant to a stock grant, stock option plan or stock purchase plan or other stock plan or arrangement approved by the Board of Directors ("Incentive Shares"); (B) additional shares of Common Stock, issued by the Company at purchase prices lower than \$1.00 per share (adjusted for stock splits, combinations and the like) (referred to hereafter as the "Adjustment Price" for the Series B Preferred Stock), which are issued subsequent to the Original Issue Date for the Series B Preferred Stock and when the

issuance is approved both by the Board of Directors and by the holders of more than a majority of the issued and outstanding Series A and Series B Preferred Stock, voting together as a single class; (C) upon conversion of shares of the Preferred Stock authorized herein; and (D) as a dividend or distribution on the Preferred Stock authorized herein.

(ii) **No Adjustment Of Conversion Price.** No adjustment in the Conversion Price of a particular share of Series A Preferred Stock or Series B Preferred Stock shall be made in respect of the issuance of Additional Shares of Common Stock unless the consideration per share for an Additional Share of Common Stock issued or deemed to be issued by the Company is less than the Conversion Price (in the case of the Series A Preferred Stock) or the Adjustment Price (in the case of the Series B Preferred Stock) in effect on the date of, and immediately prior to such issue.

(iii) **Deemed Issue Of Additional Shares Of Common Stock For Options And Convertible Securities.** In the event the Company at any time or from time to time after the Original Issue Date of the Series A Preferred Stock or of the Series B Preferred Stock, as the case may be, shall issue any Options or Convertible Securities, then the maximum number of shares (as set forth in the instrument relating thereto without regard to any provisions contained herein for a subsequent adjustment of such number) of Common Stock issuable upon the exercise of such Options or, in the case of Convertible Securities and Options therefor, the conversion or exchange of such Convertible Securities, shall be deemed to be Additional Shares of Common Stock issued as of the time of such issue, provided that (1) Additional Shares of Common Stock shall not be deemed to have been issued with respect to the Series A Preferred Stock unless the consideration per share (determined pursuant to Section 5g(v) hereof) for such Additional Shares of Common Stock would be less than the Conversion Price of the Series A Preferred Stock in effect on the date of and immediately prior to such issue, or such record date, as the case may be; (2) Additional Shares of Common Stock shall not be deemed to have been issued with respect to the Series B Preferred Stock unless the consideration per share (determined pursuant to Section 5g(v) hereof) for such Additional Shares of Common Stock would be less than the Adjustment Price of the Series B Preferred Stock in effect on the date of and immediately prior to such issue, or such record date, as the case may be; and provided further that (3) in any such case in which Additional Shares of Common Stock are deemed to be issued:

(1) no further adjustment in the applicable Conversion Price of the Series A Preferred Stock or of the Series B Preferred Stock, as the case may be, shall be made upon the subsequent issue of Convertible Securities or shares of Common Stock upon the exercise of such Options or conversion or exchange of such convertible Securities;

(2) if such Options or Convertible Securities by their terms provide, with the passage of time or otherwise, for any change in the amount of consideration payable to the Company, or change in the number of shares of Common Stock issuable, upon the exercise, conversion or exchange thereof, the Conversion Price of the Series A Preferred Stock or of the Series B Preferred Stock, as the case may be, computed upon the original issue thereof, and any subsequent adjustment based thereon, shall, upon any such

change becoming effective, be recomputed to reflect an appropriate increase or decrease reflecting such change insofar as it affects such Options or the rights of conversion or exchange under such Convertible Securities, but only if as result of such adjustment such Conversion Price for such series as then in effect is thereby reduced;

(3) upon the expiration of any such Options or rights of conversion or exchange under such Convertible Securities which shall not have been exercised, the Conversion Price of the Series A Preferred Stock or of the Series B Preferred Stock, as the case may be, computed upon the original issue thereof, and any subsequent adjustment based thereon, shall, upon such expiration, be recomputed as if:

(A) in the case of Convertible Securities or Options for Common Stock, the only Additional Shares of Common Stock issued were shares of Common Stock, if any, actually issued upon the exercise of such Options or upon the conversion or exchange of such Convertible Securities and the consideration received therefor was the consideration actually received by the Company for the issue of all such Options, whether or not exercised, plus the consideration actually received by the Company upon the exercise of such options, plus the consideration actually received by the Company for the issue of all such Convertible Securities which were actually converted or exchanged, plus the additional consideration, if any, actually received by the Company upon such conversion or exchange, and

(B) in the case of Options for Convertible Securities, only the Convertible Securities, if any, actually issued upon the exercise thereof were issued at the time of issue of such options, and the consideration received by the Company for Additional Shares of Common Stock deemed to have been then issued was the consideration actually received by the corporation for the issue of all such Options, whether or not exercised, plus the consideration deemed to have been received by the corporation upon the issue of the Convertible Securities with respect to which such Options were actually exercised;

(4) no readjustment pursuant to clause (2) or (3) above shall have the effect of increasing the Conversion Price of the Series A Preferred Stock or of the Series B Preferred Stock to an amount that exceeds the lower of (x) the applicable Conversion Price on the original adjustment date, or (y) the applicable Conversion Price that would have resulted from any issuance of Additional Shares of Common Stock between the original adjustment date and such readjustment date; and

(5) in the case of any Options that expire by their terms not more than 30 days after the date of issue thereof, no adjustment of the applicable Conversion Price shall be made until the expiration or exercise of all such Options, unless during such 30 day period there is a conversion or an "as adjusted basis" determination regarding the Preferred Stock, whereupon such adjustment shall be made in the same manner provided in clause (3) above.

(iv) Adjustment Of Series A Preferred And Series B Preferred Stock Conversion Prices Upon Issuance Of Additional Shares Of Common Stock. In the event the Company shall issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued pursuant to Section 5g(iii)) without consideration or for a consideration per share less than the Conversion Price for a share of Series A Preferred Stock or the Adjustment Price for a share of Series B Preferred Stock in effect on the date of, and immediately prior to such issue, then and in such event, such Conversion Price shall be reduced, concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying such Conversion Price by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of shares of Common Stock that the aggregate consideration received by the Company for the total number of Additional Shares of Common Stock so issued would purchase at such Conversion Price (in the case of the Series A Preferred Stock) or such Adjustment Price (in the case of Series B Preferred Stock); and the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of such Additional Shares of Common Stock so issued; and provided further that, for the purposes of this Section 5g(iv), all shares of Common Stock issuable upon conversion of outstanding Preferred Stock shall be deemed to be outstanding, and immediately after any Additional Shares of Common Stock are deemed issued pursuant to Section 5g(iii), such Additional Shares of Common Stock shall be deemed to be outstanding. Notwithstanding the provisions of this Section 5g(iv) to the contrary, upon the occurrence of the events giving rise to an adjustment of Conversion Prices described in Sections 5d, e or f, the Conversion Price of the Series A Preferred Stock and/or of the Series B Preferred Stock, as applicable, shall be adjusted solely pursuant to such of those Sections as are applicable and not pursuant to this Section 5g(iv).

(v) Determination Of Consideration. For purposes of this Section 5g, the consideration received by the Company for the issue of any Additional Shares of Common Stock shall be computed as follows:

(1) Cash And Property. Such consideration shall:

(A) insofar as it consists of cash, be computed at the aggregate amount of cash received by the Company excluding amounts paid or payable for accrued interest or accrued dividends;

(B) insofar as it consists of property other than cash, be computed at the fair value thereof at the time of such issue, as determined in good faith by the Board of Directors; and

(C) in the event Additional Shares of Common Stock are issued together with other shares or securities or other assets of the Company for consideration which covers both, be the proportion of such consideration so received, computed as provided in clauses (A) and (B) above, as determined in good faith by the Board of Directors.

(2) Options And Convertible Securities. The consideration per share received by the Company for Additional Shares of Common Stock deemed to have been issued pursuant to Section 5g(iii), relating to Options and Convertible Securities, shall be determined by dividing:

(A) the total amount, if any, received or receivable by the Company as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Company upon the exercise of such options or the conversion or exchange of such Convertible Securities, or in the case of options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities, by

(B) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon exercise of such Options or the conversion or exchange of such Convertible Securities.

(3) Stock Dividends And Stock Subdivisions. Any Additional Shares of Common Stock deemed to have been issued, relating to stock dividends and stock subdivisions, shall be deemed to have been issued for no consideration.

h. No Impairment. The Company will not, by amendment of its Certificate of Incorporation (except as approved by the holders of the Preferred Stock as provided herein) or through any reorganization, transfer of assets, consolidation, merger, dissolution, issuance or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed under this Section, but will at all times in good faith assist in the carrying out of all of the provisions of this Section 5 and in the taking of all such actions as may be necessary or appropriate in order to protect the conversion rights of holders of Preferred Stock against impairment.

i. Certificate Of Adjustments. Upon the occurrence of each adjustment or readjustment of the Conversion Price of the Preferred Stock, the Company shall promptly compute such adjustment or readjustment in accordance with the terms of this Section 5 and shall prepare and furnish to each holder of Preferred Stock a certificate or certificates setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Company shall, upon the written request at any time of any holder of Preferred Stock, furnish or cause to be furnished to such holder a like certificate or certificates.

j. Notice Of Record Dates. In the event of any taking by the Company of a record of the holders of any class of securities for the purpose of determining the holders of such securities who are entitled to receive a dividend or other distribution or any right to subscribe for, purchase or otherwise acquire any shares of stock of any class or any other

securities or property of the Company, the Company shall mail to each holder of Preferred Stock, at least 20 days prior to the date specified in such notice, a notice specifying the date on which such record is to be taken for the purpose of such dividend, distribution or right, and the amount and character of such dividend, distribution or right.

k. Mechanics Of Conversion. Before any holder of Preferred Stock shall be entitled to convert such Preferred Stock into shares of Common Stock, such holder shall surrender the certificate or certificates for such shares, duly endorsed, at the office of the Company or of any transfer agent for the Preferred Stock and shall give written notice to the Company at such office that such holder elects to convert the same and shall state in the notice the name or names in which the certificate or certificates for shares of Common Stock are to be issued. The Company shall then, as soon as is practicable, issue and deliver at such office to the holder of Preferred Stock, or to his or her nominee or nominees, a certificate or certificates for the number of shares of Common Stock to which he or she would be entitled. Such conversion shall be deemed to have been made immediately prior to the close of business on the date of surrender of the shares of Preferred Stock to be converted into shares of Common Stock. The person or persons entitled to receive the shares of Common Stock issuable upon conversion, shall be treated for all purposes as the record holder or holders of such shares of Common Stock on the date of conversion. In the case of automatic conversion, the Company shall not be obligated to issue certificates of Common Stock unless certificates evidencing the converted shares of Preferred Stock are delivered either to the Company or its transfer agent.

l. No Fractional Shares. No fractional shares shall be issued upon the conversion of any shares of Preferred Stock. All shares of Common Stock (including fractions) issuable upon conversion of shares of Preferred Stock held by a single holder of such stock shall be aggregated for the purpose of determining whether the conversion would result in the issuance of any fractional share. If, after aggregation, the conversion would result in the issuance of a fractional share of Common Stock, the Company shall, in lieu of issuing any fractional share, pay the holder otherwise entitled to such fraction, a sum in cash equal to the fair market value of such fraction on the date of conversion (as determined in good faith by the Board of Directors of the corporation).

m. Reservation Of Common Stock. The Company shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock solely for the purpose of effecting the conversion of the shares of Preferred Stock such number of shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of Preferred Stock. If at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of the then outstanding shares of Preferred Stock, the Company will take such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose.

6. Redemption.

a. Holders' Option To Have Series B Preferred Stock Redeemed.

Holders of more than 60% of the then-outstanding shares of Series B Preferred Stock, at any time on or after the fourth anniversary of the Original Issue Date of the Series B Preferred Stock, may at their option, exercised by written notice (the "Redemption Request Notice") to the Secretary of the Corporation, cause their shares of Series B Preferred Stock (the "Redemption Stock") to be redeemed by the Corporation. The Corporation, within 30 days after receipt of the Redemption Request Notice (the "Initial Redemption Date"), shall redeem 50% of the Redemption Stock by a cash payment, out of any funds legally available therefor, in the amount of the Redemption Price, and within one year following the Initial Redemption Date (the "Second Redemption Date") shall redeem the remaining 50% of the Redemption Stock by a cash payment, out of any funds legally available therefor, in the amount of the Redemption Price.

b. Redemption Notice. The Corporation, within five days after receipt of a Redemption Request Notice, shall give notice (the "Notice of Receipt") to all of the holders of Series B Preferred Stock of the Corporation's receipt of the Redemption Request Notice. Such Notice of Receipt shall set forth all of the following: (i) the stockholders of Series B Preferred Stock who have exercised their redemption option and the number of shares each has elected to cause the Corporation to redeem; (ii) the total number of shares the Corporation may redeem with legally available funds; (iii) the Initial Redemption Date; (iv) the price at which Redemption Stock shall be redeemed at the Initial Redemption Date and at the Second Redemption Date; (v) the time, place and manner in which the stockholders have requested payment of each installment for their Redemption Stock in accordance with this Section 5, and the time, place and manner of the surrender of the shareholders' share certificates as required under Section 6d below; and (vi) the date on which any rights to convert the Preferred Stock to Common Stock terminate. Each stockholders who has not exercised his or her redemption right under Section 6a above shall have 10 days from the date of such Notice of Receipt to submit a Redemption Request Notice electing to redeem all or any portion of his or her Series B Preferred Stock upon the same terms described in the Notice of Receipt.

c. Effect of Lack of Funds Legally Available for Redemption. In the event that the Corporation does not possess sufficient funds legally available to redeem all of the shares subject to Redemption Request Notices delivered under Section 6a or under Section 6b above, the Corporation shall redeem the shares of each stockholder submitting a Redemption Request Notice pro-rata to the number of shares all shareholders have elected to require the Corporation to redeem pursuant to such Redemption Request Notices.

d. Surrender of Certificates. As a condition to the Corporation's redemption of any stockholder's Redemption Stock, that stockholder shall first surrender the certificate or certificates evidencing his or her ownership of the Redemption Stock with the Secretary of the Corporation.

e. Rights of Stockholder of Redeemed Shares. From and after the Initial Redemption Date or the Second Redemption Date, as the case may be, unless there shall

have been a default in payment of the Redemption Price, all dividends on the shares of Series B Preferred Stock designated for redemption on the Initial Redemption Date or the Second Redemption Date in the Redemption Request Notice, and redeemed and paid for under this Section 5, shall cease to accrue and all rights of the holders of such shares as holders of Series B Preferred Stock (except the right to receive the Redemption Price without interest upon surrender of their certificates) shall cease and terminate with respect to such shares, and such shares shall not thereafter be transferred on the books of the Corporation or be deemed to be outstanding for any purpose. All or any portion of the Redemption Stock of any redeeming stockholder shall be subject to rescission if the Corporation fails to timely redeem such shares for any reason within 180 days after the applicable Redemption Date (the "Default Period"). Such rescission shall be made by written notice of such rescission delivered to the Corporation within 180 days after termination of such Default Period. If such election to rescind is made, the shares subject to such rescission shall no longer be subject to redemption pursuant to this Section 6.

7. No Reissuance of Preferred Stock. No share or shares of Series A Preferred Stock or Series B Preferred Stock acquired by the Corporation by reason of redemption, purchase, conversion or otherwise shall be reissued.

8. No Preemptive Rights. Stockholders shall have no preemptive rights except as granted by the Company pursuant to written agreements.

V.

A. A director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for any breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the Corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the Delaware General Corporation Law, or (iv) for any transaction from which the director derived an improper personal benefit. If the Delaware General Corporation Law is amended after approval by the stockholders of this Article to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director shall be eliminated or limited to the fullest extent permitted by the Delaware General Corporation Law, as so amended.

B. Any repeal or modification of this Article IV shall only be prospective and shall not affect the rights under this Article IV in effect at the time of the alleged occurrence of any action or omission to act giving rise to liability.

VI.

For the management of the business and for the conduct of the affairs of the Corporation, and in further definition, limitation and regulation of the powers of the Corporation, of its directors and of its stockholders or any class thereof, as the case may be, it is further provided that:

A. The management of the business and the conduct of the affairs of the Corporation shall be vested in its Board of Directors. The number of directors which shall constitute the whole Board of Directors shall be fixed by the Board of Directors in the manner provided in the Bylaws.

B. The Board of Directors may from time to time make, amend, supplement or repeal the Bylaws; provided, however, that the stockholders may change or repeal any Bylaw adopted by the Board of Directors by the affirmative vote of the holders of a majority of the voting power of all of the then outstanding shares of the capital stock of the Corporation; and, provided further, that no amendment or supplement to the Bylaws adopted by the Board of Directors shall vary or conflict with any amendment or supplement thus adopted by the stockholders.

C. The directors of the Corporation need not be elected by written ballot unless the Bylaws so provide.

VII.

The name and the mailing address of the Sole Incorporator is as follows:

Name: Andrei M. Manolju
Address: Cooley Godward LLP
Five Palo Alto Square
3000 El Camino Real
Palo Alto, CA 94306-2155

IN WITNESS WHEREOF, this Certificate has been subscribed this 21st day of May 1997 by the undersigned who affirms that the statements made herein are true and correct.


Andrei M. Manolju
Andrei M. Manolju
Sole Incorporator

State of Delaware
Office of the Secretary of State PAGE 1

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF OWNERSHIP, WHICH MERGES:

"PARADISE ELECTRONICS, INC.", A DELAWARE CORPORATION, WITH AND INTO "GMI NEWCO, INC." UNDER THE NAME OF "GMI NEWCO, INC.", A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE TWENTY-NINTH DAY OF JUNE, A.D. 2001, AT 4 O'CLOCK P.M.

A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.

3391857 8100M
010317859



Harriet Smith Windsor
Harriet Smith Windsor, Secretary of State

AUTHENTICATION: 1221814

DATE: 07-02-01

FROM CORPORATION TRUST-DOVER DE 302-674-6340

(MON) 7. 2' 01

9:21/ST. 9 STATE OF DELAWARE
SEARCHED 9:21/ST. 9 INDEXED 9:21/ST.
DIVISION OF CORPORATIONS
FILED 04:00 PM 06/29/2001
010317859 - 9391857

CERTIFICATE OF OWNERSHIP AND MERGER
OF
GMI NEWCO, INC.
(a Delaware corporation)

We, the undersigned Amnon Fisher and Eric Erdman, certify that:

1. We are the President and Secretary, respectively, of GMI Newco, Inc., a Delaware corporation (the "Corporation").
2. The Corporation owns 100% of the outstanding shares of capital stock of Paradise Electronics, Inc., a Delaware corporation.
3. The following resolutions of the Board of Directors of the Corporation were duly adopted on May 30, 2001 by unanimous written consent:

WHEREAS the Corporation lawfully owns all the capital stock of Paradise Electronics, Inc., a Delaware corporation ("Paradise"), and now desires to merge Paradise with and into the Corporation;

RESOLVED: That the Board of Directors of the Corporation hereby approves the merger of Paradise with and into the Corporation pursuant to Section 253 of the Delaware Law and hereby approves the Corporation's assumption of all of the liabilities and obligations of Paradise, and for all of such actions to be carried out by the Corporation, as the sole shareholder of Paradise.

RESOLVED FURTHER: That the proper officers of the Corporation be, and they hereby are, authorized to make, execute and acknowledge a Certificate of Ownership and Merger setting forth a copy of the resolutions to merge Paradise with and into the Corporation and the date of adoption thereof, and to file the same in the office of the Secretary of State of the State of Delaware.

RESOLVED FURTHER: That the officers of the Corporation be, and each of them hereby is, authorized and empowered, for and on behalf of the Corporation to execute any and all documents, contracts or instruments and to do or cause to be done any and all such other acts and things (including but not limited to, obtaining all required tax clearances from all applicable states) that they, or any of them, may deem necessary or desirable in order to implement fully the purposes and intent of the foregoing resolutions, and any such documents, contracts or instruments so executed and delivered or acts or things done or caused to be done by them or any of them shall be conclusive evidence of their or his or her authority in so doing.

EON CORPORATION TRUST-DOVER, DE 302-674-8340 (MON) 7. 2' 01 9:21/ST. 9:19/NO. 4260103464 P 3

IN WITNESS WHEREOF, the undersigned have executed this Certificate of Ownership
and Merger on this 29th day of June, 2001.

/s/ Amnon Fisher
Amnon Fisher, President

/s/ Eric Erdman
Eric Erdman, Secretary

Each of the undersigned further declares under penalty of perjury under the laws of the State
of Delaware that he has read the foregoing Certificate of Ownership and Merger and knows the
contents thereof and that the same is true of his own knowledge.

Executed at Alviso, California on June 29, 2001.

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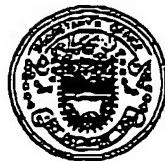
/s/ Amnon Fisher
Amnon Fisher, President

/s/ Eric Erdman
Eric Erdman, Secretary

Office of the Secretary of State PAGE 1

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE RESTATED CERTIFICATE OF "GMI NEWCO, INC.", CHANGING ITS NAME FROM "GMI NEWCO, INC." TO "GENESIS MICROCHIP CORPORATION", FILED IN THIS OFFICE ON THE SIXTEENTH DAY OF JULY, A.D. 2001, AT 9 O'CLOCK A.M.

A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.



Harriet Smith Windsor
Harriet Smith Windsor, Secretary of State

3391857 8100

010340272

AUTHENTICATION: 1243432

DATE: 07-16-01

**AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF GMI NEWCO, INC.
a Delaware corporation**

GMI Newco, Inc., a corporation organized and existing under the General Corporation Law of the State of Delaware (the "General Corporation Law"), does hereby certify:

FIRST: The name of this corporation is GMI Newco, Inc. The original Certificate of Incorporation of the corporation was filed with the Secretary of State of the State of Delaware on May 17, 2001.

SECOND: The amendment and restatement herein set forth has been duly approved by the Board of Directors of the corporation and by the sole stockholder of the corporation pursuant to Sections 141, 228 and 242 of the Delaware Law. Approval of this amendment and restatement was approved by a written consent signed by the sole stockholder of the corporation pursuant to Section 228 of the Delaware Law.

THIRD: The restatement herein set forth has been duly adopted pursuant to Section 245 of the Delaware Law. This Amended and Restated Certificate of Incorporation restates and integrates and amends the provisions of the corporation's Certificate of Incorporation.

FOURTH: The text of the Certificate of Incorporation is hereby amended and restated to read in its entirety as follows:

ARTICLE I

The name of this corporation is Genesis Microchip Corporation (the "Corporation").

ARTICLE II

The address of its registered office in the State of Delaware is Corporation Trust Center, 1209 Orange Street, City of Wilmington, County of New Castle, Delaware 19081. The name of its registered agent at such address is The Corporation Trust Company.

ARTICLE III

The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law.

ARTICLE IV

This Corporation is authorized to issue one class of shares, designated as Common Stock, consisting of fifteen thousand (15,000) shares, par value \$0.001 per share.

ARTICLE V

The Corporation is to have perpetual existence.

ARTICLE VI

Except as otherwise provided in this Certificate of Incorporation, the Board of Directors may make, repeal, alter, amend or rescind any or all of the Bylaws of the Corporation.

ARTICLE VII

The number of directors which constitute the whole Board of Directors shall be designated in the Bylaws of the Corporation.

ARTICLE VIII

Elections of directors at an annual or special meeting need not be by written ballot unless a stockholder demands election by written ballot at the meeting and before voting begins or unless the Bylaws of the Corporation shall so provide.

ARTICLE IX

Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws may provide. The books of the Corporation may be kept (subject to any provision contained in the statutes) outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the Corporation.

ARTICLE X

The Corporation may amend, alter, change or repeal any provision contained in this Amended and Restated Certificate of Incorporation, in the manner now or hereafter prescribed by statute. All rights conferred on stockholders herein are granted subject to this reservation.

ARTICLE XI

To the fullest extent permitted by the General Corporation Law, as the same may be amended from time to time, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. If the General Corporation Law is hereafter amended to authorize, with or without the approval of a corporation's stockholders, further reductions in the liability of the corporation's directors for breach of fiduciary duty, then a director of the Corporation shall not be liable for any such breach to the fullest extent permitted by the General Corporation Law as so amended.

Any repeal or modification of the foregoing provisions of this Article XI, by amendment of this Article XI or by operation of law, shall not adversely affect any right or protection of a director of the Corporation with respect to any acts or omissions of such director occurring prior to such repeal or modification.

ARTICLE XII

To the fullest extent permitted by applicable law, the Corporation is authorized to provide indemnification of (and advancement of expenses to) directors, officers, employees and other agents of the Corporation (and any other persons to which Delaware law permits the Corporation to provide indemnification), through Bylaw provisions, agreements with any such director, officer, employee or other agent or other person, vote of stockholders or disinterested directors, or otherwise, in excess of the indemnification and advancement otherwise permitted by Section 145 of the General Corporation Law, subject only to limits created by applicable Delaware law (statutory or nonstatutory), with respect to actions for breach of duty to a corporation, its stockholders and others.

Any repeal or modification of any of the foregoing provisions of this Article XII, by amendment of this Article XII or by operation of law, shall not adversely affect any right or protection of a director, officer, employee or other agent or other person existing at the time of, or increase the liability of any director of the Corporation with respect to any acts or omissions of such director, officer or agent occurring prior to such repeal or modification.

ARTICLE XIII

Whenever a compromise or arrangement is proposed between this Corporation and its creditors or any class of them and/or between this Corporation and its stockholders or any class of them, any court of equitable jurisdiction within the State of Delaware may, on the application in a summary way of this Corporation or of any creditor or stockholder thereof or on the application of any receiver or receivers appointed for this Corporation under the provisions of Section 291 of Title 8 of the Delaware Code or on the application of trustees in dissolution or of any receiver or receivers appointed for this Corporation under the provisions of Section 279 of Title 8 of the Delaware Code, order a meeting of the creditors or class of creditors, and/or of the stockholders or class of stockholders of this Corporation, as the case may be, to be summoned in such manner as the said court directs. If a majority in number representing three-fourths in value of the creditors or class of creditors, and/or of the stockholders or class of stockholders of this Corporation, as the case may be, agree to any compromise or arrangement and to any reorganization of this Corporation as a consequence of such compromise or arrangement, the said compromise or arrangement and the said reorganization shall, if sanctioned by the court to which the said application has been made, be binding on all the creditors or class of creditors, and/or on all the stockholders or class of stockholders, of this Corporation, as the case may be, and also on this Corporation.

IN WITNESS WHEREOF, this Amended and Restated Certificate of Incorporation has been signed by the Secretary of this Corporation this 16th day of July, 2001.

GMI NEWCO, INC.
a Delaware corporation

By: /s/ Eric Erdman

Eric Erdman,
Secretary

Delaware

PAGE 1

The First State

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE RESTATED CERTIFICATE OF "GENESIS MICROCHIP CORPORATION", CHANGING ITS NAME FROM "GENESIS MICROCHIP CORPORATION" TO "GENESIS MICROCHIP (DELAWARE) INC.", FILED IN THIS OFFICE ON THE SEVENTEENTH DAY OF OCTOBER, A.D. 2001, AT 4 O'CLOCK P.M.



3391857 8100

020006926

Harriet Smith Windsor

Harriet Smith Windsor, Secretary of State

AUTHENTICATION: 1540871

DATE: 01-04-02

**AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF GENESIS MICROCHIP CORPORATION
a Delaware corporation**

Genesis Microchip Corporation, a corporation organized and existing under the General Corporation Law of the State of Delaware (the "General Corporation Law"), does hereby certify:

FIRST: The name of this corporation is Genesis Microchip Corporation. The original name of this corporation was GMI Newco, Inc. The original Certificate of Incorporation of the corporation was filed with the Secretary of State of the State of Delaware on May 17, 2001.

SECOND: The amendment and restatement herein set forth has been duly approved by the Board of Directors of the corporation and by the sole stockholder of the corporation pursuant to Sections 141, 228 and 242 of the Delaware Law.

THIRD: The restatement herein set forth has been duly adopted pursuant to Section 245 of the Delaware Law. This Amended and Restated Certificate of Incorporation restates and integrates and amends the provisions of the corporation's Certificate of Incorporation.

FOURTH: The text of the Certificate of Incorporation is hereby amended and restated to read in its entirety as follows:

ARTICLE I

The name of this corporation is Genesis Microchip (Delaware) Inc. (the "Corporation").

ARTICLE II

The address of its registered office in the State of Delaware is Corporation Trust Center, 1209 Orange Street, City of Wilmington, County of New Castle, Delaware 19081. The name of its registered agent at such address is The Corporation Trust Company.

ARTICLE III

The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law.

ARTICLE IV

This Corporation is authorized to issue one class of shares, designated as Common Stock, consisting of fifteen thousand (15,000) shares, par value \$0.001 per share.

ARTICLE V

STATE OF DELAWARE
SECRETARY OF STATE
DIVISION OF CORPORATIONS
FILED 04:00 PM 10/17/2001
010518423 - 1992657

The Corporation is to have perpetual existence.

ARTICLE VI

Except as otherwise provided in this Certificate of Incorporation, the Board of Directors may make, repeal, alter, amend or rescind any or all of the Bylaws of the Corporation.

ARTICLE VII

The number of directors which constitute the whole Board of Directors shall be designated in the Bylaws of the Corporation.

ARTICLE VIII

Elections of directors at an annual or special meeting need not be by written ballot unless a stockholder demands election by written ballot at the meeting and before voting begins or unless the Bylaws of the Corporation shall so provide.

ARTICLE IX

Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws may provide. The books of the Corporation may be kept (subject to any provision contained in the statutes) outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the Corporation.

ARTICLE X

The Corporation may amend, alter, change or repeal any provision contained in this Amended and Restated Certificate of Incorporation, in the manner now or hereafter prescribed by statute. All rights conferred on stockholders herein are granted subject to this reservation.

ARTICLE XI

To the fullest extent permitted by the General Corporation Law, as the same may be amended from time to time, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. If the General Corporation Law is hereafter amended to authorize, with or without the approval of a corporation's stockholders, further reductions in the liability of the corporation's directors for breach of fiduciary duty, then a director of the Corporation shall not be liable for any such breach to the fullest extent permitted by the General Corporation Law as so amended.

Any repeal or modification of the foregoing provisions of this Article XI, by amendment of this Article XI or by operation of law, shall not adversely affect any right or protection of a director of the Corporation with respect to any acts or omissions of such director occurring prior to such repeal or modification.

ARTICLE XII

To the fullest extent permitted by applicable law, the Corporation is authorized to provide indemnification of (and advancement of expenses to) directors, officers, employees and other agents

of the Corporation (and any other persons to which Delaware law permits the Corporation to provide indemnification), through Bylaw provisions, agreements with any such director, officer, employee or other agent or other person, vote of stockholders or disinterested directors, or otherwise, in excess of the indemnification and advancement otherwise permitted by Section 145 of the General Corporation Law, subject only to limits created by applicable Delaware law (statutory or nonstatutory), with respect to actions for breach of duty to a corporation, its stockholders and others.

Any repeal or modification of any of the foregoing provisions of this Article XII, by amendment of this Article XII or by operation of law, shall not adversely affect any right or protection of a director, officer, employee or other agent or other person existing at the time of, or increase the liability of any director of the Corporation with respect to any acts or omissions of such director, officer or agent occurring prior to such repeal or modification.

ARTICLE XIII

Whenever a compromise or arrangement is proposed between this Corporation and its creditors or any class of them and/or between this Corporation and its stockholders or any class of them, any court of equitable jurisdiction within the State of Delaware may, on the application in a summary way of this Corporation or of any creditor or stockholder thereof or on the application of any receiver or receivers appointed for this Corporation under the provisions of Section 291 of Title 8 of the Delaware Code or on the application of trustees in dissolution or of any receiver or receivers appointed for this Corporation under the provisions of Section 279 of Title 8 of the Delaware Code, order a meeting of the creditors or class of creditors, and/or of the stockholders or class of stockholders of this Corporation, as the case may be, to be summoned in such manner as the said court directs. If a majority in number representing three-fourths in value of the creditors or class of creditors, and/or of the stockholders or class of stockholders of this Corporation, as the case may be, agree to any compromise or arrangement and to any reorganization of this Corporation as a consequence of such compromise or arrangement, the said compromise or arrangement and the said reorganization shall, if sanctioned by the court to which the said application has been made, be binding on all the creditors or class of creditors, and/or on all the stockholders or class of stockholders, of this Corporation, as the case may be, and also on this Corporation.

IN WITNESS WHEREOF, this Amended and Restated Certificate of Incorporation has been signed by the Secretary of this Corporation this 16th day of October, 2001.

GENESIS MICROCHIP CORPORATION
a Delaware corporation

By: Eric Erdman /s/
Eric Erdman,
Secretary